

### **Amendments to the Claims**

Claims 1-10 (canceled)

Claim 11 (previously presented): A method for inhibiting or preventing T cell/B cell interactions associated with Crohn's disease comprising administering an amount of a monoclonal anti-CD80 antibody or a CD80-binding fragment thereof sufficient to inhibit the binding of B cells and T cells via the CD80/CD28 pathway; wherein said monoclonal antibody or fragment thereof binds specifically to CD80 antigen without inhibiting the binding of CD80 antigen to CTLA-4.

Claim 12 (previously presented): The method of Claim 11, wherein said anti-CD80 antibody is a human monoclonal antibody, or a chimeric antibody comprising variable regions of a non-human anti-CD80 antibody and human constant regions.

Claims 13-18 (canceled)

Claim 19 (currently amended): The method of Claim 11, wherein said anti-CD80 antibody competes for binding to CD80 antigen with antibody 7C10, produced by a hybridoma assigned ATTC accession no. HB-12117, or antibody 16C10, produced by a hybridoma assigned ATTC accession no. HB-12119.

Claim 20 (previously presented): The method of Claim 12, wherein said anti-CD80 antibody is a chimeric antibody comprising variable regions of an Old World monkey antibody and human constant regions.

Claims 21-26 (canceled)

Claim 27 (previously presented): A method of treating Crohn's disease in a subject in need of such treatment by administering a therapeutically effective amount of a monoclonal anti-CD80 antibody or a CD80-binding fragment thereof that does not inhibit the CD80/CTLA-4 binding interaction.

Claim 28 (previously presented): The method of Claim 27, comprising administering a human monoclonal anti-CD80 antibody, or a chimeric antibody comprising variable regions of a non-human anti-CD80 antibody and human constant regions.

Claim 29 (previously presented): The method of Claim 28, comprising administering a chimeric anti-CD80 antibody comprising variable regions of an Old World monkey antibody and human constant regions.

Claim 30 (previously presented): The method of Claim 11, wherein said anti-CD80 antibody or CD80-binding fragment thereof is administered in combination with an immunomodulator selected from the group consisting of IL-7, IL-10, CTLA4-Ig, soluble CTLA-4, an anti-CD28 antibody, and a CD28-binding fragment of an anti-CD28 antibody.

Claim 31 (previously presented): The method of Claim 27, wherein said anti-CD80 antibody or CD80-binding fragment thereof is administered in combination with an immunomodulator selected from the group consisting of IL-7, IL-10, CTLA4-Ig, soluble CTLA-4, an anti-CD28 antibody, and a CD28-binding fragment of an anti-CD28 antibody.

Claim 32 (previously presented): The method of Claim 11, wherein said anti-CD80 antibody or CD80-binding fragment thereof is administered in combination with an immunosuppressant selected from the group consisting of cyclosporin A, FK506, anti-TNF $\alpha$ , anti-CD54, anti-CD11, anti-CD11a, anti-IL-1, TNF $\alpha$  receptor, and IL-1 receptor.

Claim 33 (previously presented): The method of Claim 27, wherein said anti-CD80 antibody or CD80-binding fragment thereof is administered in combination with an immunosuppressant selected from the group consisting of cyclosporin A, FK506, anti-TNF $\alpha$ , anti-CD54, anti-CD11, anti-CD11a, anti-IL-1, TNF $\alpha$  receptor, and IL-1 receptor.

Claim 34 (currently amended): The method of Claim 20, wherein said anti-CD80 antibody competes for binding to CD80 antigen with antibody 7C10, produced by a hybridoma assigned ATTC accession no. HB-12117, or antibody 16C10, produced by a hybridoma assigned ATTC accession no. HB-12119.

Claim 35 (currently amended): The method of Claim 20, wherein said anti-CD80 antibody is a chimeric antibody comprising variable regions of antibody 7C10, produced by a hybridoma assigned ATTC accession no. HB-12117, or antibody 16C10, produced by a hybridoma assigned ATTC accession no. HB-12119.

Claim 36 (previously presented): The method of Claim 35, wherein said chimeric anti-CD80 antibody comprises a human constant region selected from the group consisting of human gamma 1 constant region, human gamma 4 constant region, and human gamma 4 PE constant region.

Claim 37 (previously presented): The method of Claim 35, wherein the light chain of said anti-CD80 antibody has the amino acid sequence shown in Fig. 3a (SEQ ID NO:1) and the heavy chain of said anti-CD80 antibody has the amino acid sequence shown in Figs. 3b and 3c (SEQ ID NO:3).

Claim 38 (previously presented): The method of Claim 35, wherein the light chain of said anti-CD80 antibody has the amino acid sequence shown in Fig. 5a (SEQ ID NO:9) and the heavy chain of said anti-CD80 antibody has the amino acid sequence shown in Figs. 5b and 5c (SEQ ID NO:11).

Claim 39 (currently amended): The method of Claim 36, wherein said chimeric anti-CD80 antibody comprises variable regions of antibody 16C10, produced by a hybridoma assigned ATTC accession no. HB-12119, and a human gamma 1 constant region.

Claim 40 (previously presented): The method of Claim 11, comprising administering a CD80-binding fragment of a monoclonal antibody that binds specifically to CD80 antigen without inhibiting the binding of CD80 antigen to CTLA-4.

Claim 41 (previously presented): The method of Claim 40, wherein said CD80-binding antibody fragment is selected from the group consisting of Fab, F(ab')<sub>2</sub>, and Fv.

Claim 42 (currently amended): The method of Claim 40, wherein said CD80-binding antibody fragment competes for binding to CD80 antigen with antibody 7C10, produced by a

hybridoma assigned ATTC accession no. HB-12117, or antibody 16C10, produced by a hybridoma assigned ATTC accession no. HB-12119.

Claim 43 (previously presented): The method of Claim 40, wherein said CD80-binding antibody fragment comprises variable regions of an Old World monkey antibody.

Claim 44 (currently amended): The method of Claim 43, wherein said CD80-binding antibody fragment comprises variable regions of antibody 7C10, produced by a hybridoma assigned ATTC accession no. HB-12117, or antibody 16C10, produced by a hybridoma assigned ATTC accession no. HB-12119.

Claim 45 (currently amended): The method of Claim 27, wherein said anti-CD80 antibody competes for binding to CD80 antigen with antibody 7C10, produced by a hybridoma assigned ATTC accession no. HB-12117, or antibody 16C10, produced by a hybridoma assigned ATTC accession no. HB-12119.

Claim 46 (currently amended): The method of Claim 29, wherein said chimeric anti-CD80 antibody comprises variable regions of antibody 7C10, produced by a hybridoma assigned ATTC accession no. HB-12117, or antibody 16C10, produced by a hybridoma assigned ATTC accession no. HB-12119.

Claim 47 (previously presented): The method of Claim 46, wherein said chimeric anti-CD80 antibody comprises a human constant region selected from the group consisting of human gamma 1 constant region, human gamma 4 constant region, and human gamma 4 PE constant region.

Claim 48 (previously presented): The method of Claim 46, wherein the light chain of said anti-CD80 antibody has the amino acid sequence shown in Fig. 3a (SEQ ID NO:1) and the heavy chain of said anti-CD80 antibody has the amino acid sequence shown in Figs. 3b and 3c (SEQ ID NO:3).

Claim 49 (previously presented): The method of Claim 46, wherein the light chain of said anti-CD80 antibody has the amino acid sequence shown in Fig. 5a (SEQ ID NO:9) and

the heavy chain of said anti-CD80 antibody has the amino acid sequence shown in Figs. 5b and 5c (SEQ ID NO:11).

Claim 50 (currently amended): The method of Claim 47, wherein said anti-CD80 antibody comprises variable regions of antibody 16C10, produced by a hybridoma assigned ATTC accession no. HB-12119, and a human gamma 1 constant region.

Claim 51 (previously presented): The method of Claim 27, comprising administering a CD80-binding fragment of a monoclonal antibody that does not inhibit the CD80/CTLA-4 binding interaction.

Claim 52 (previously presented): The method of Claim 51, wherein said CD80-binding antibody fragment is selected from the group consisting of Fab, F(ab')<sub>2</sub>, and Fv.

Claim 53 (currently amended): The method of Claim 51, wherein said CD80-binding antibody fragment competes for binding to CD80 antigen with antibody 7C10, produced by a hybridoma assigned ATTC accession no. HB-12117, or antibody 16C10, produced by a hybridoma assigned ATTC accession no. HB-12119.

Claim 54 (previously presented): The method of Claim 51, wherein said CD80-binding antibody fragment comprises variable regions of an Old World monkey antibody.

Claim 55 (currently amended): The method of Claim 54, wherein said CD80-binding antibody fragment comprises variable regions of antibody 7C10, produced by a hybridoma assigned ATTC accession no. HB-12117, or antibody 16C10, produced by a hybridoma assigned ATTC accession no. HB-12119.